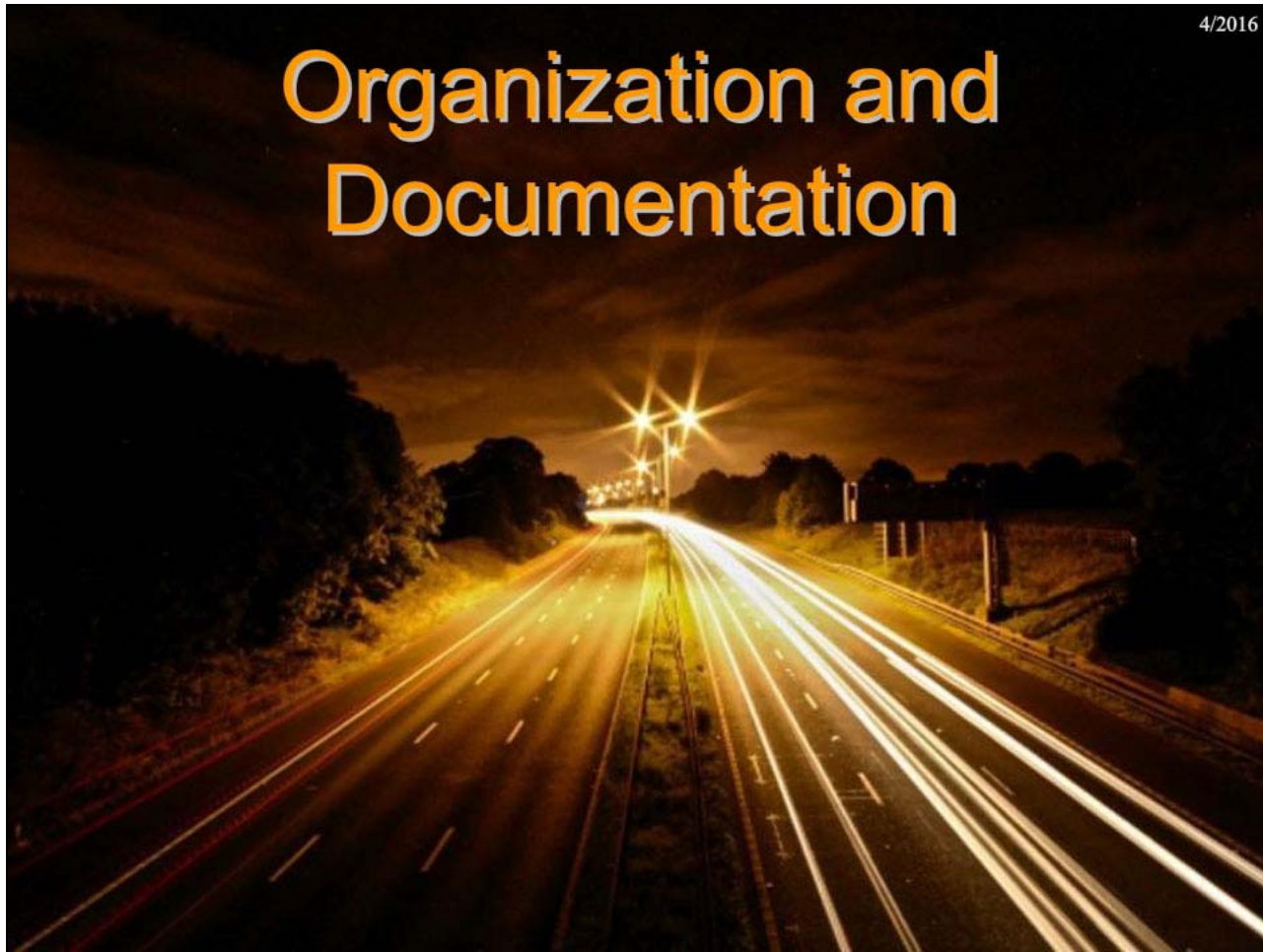


Slide 1 - Organization



**Slide notes**

Now we will look at the different partners involved and documentation necessary in successfully completing a construction project.

**Notes**

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**Slide 2 - Key Personnel**

## Key Personnel

- SHA Construction Project Engineer (CPE)
- SHA Construction Inspector
- Contractor Erosion & Sediment Control Manager (ESCM)
- SHA Regional Environmental Coordinator (Quality Assurance Program representative)
- MDE Compliance Inspector
- Independent Environmental Monitor (IEM)
- Designated Specialist

**Slide notes**

There are several members of the construction team. These individuals represent SHA, the Contractor and also other agencies

**Notes**

**Slide 3 - SHA Construction Inspection Responsibilities**

# SHA Construction Inspection Responsibilities

- Review all E&S Contract Documents
- Inspect for proper device Installation
- Inspect for Proper Maintenance of Devices
- Pre & Post Storm Inspection
- Weekly Compliance Inspection
- Review Off-site Permits (Borrow Pits, Waste Sites, etc.)
- Review Contractors Erosion & Sediment Control Manager (ESCM) Daily Reports
- Inspection should be documented using Inspection Form OOC 60
- Comply w/ NPDES permit
- Monitor contractors operations are in sequence and compliance w/ all contract documents

**Slide notes**

State Highway representatives have responsibilities centered around quality control and documentation. E & S Control installation and maintenance must be inspected regularly. A weekly project inspection must be conducted along with pre and post-storm inspections. The inspection staff has a responsibility to review any off-site permits related to the ongoing work. It is at this level of review that the Administration must ensure compliance with all contract documents and environmental permits such as the NPDES.

**Notes**



## Slide 4 - Contractors ESCM Inspection Responsibilities

# Contractors ESCM Inspection Responsibilities

- Must have MDE Green Card and SHA E&S Control Certification (Yellow Card) & submit to the SHA CPE10 days prior to commencement of work
- Knowledge & possession of all pertinent E&S Control Contract Documents
- Inspect E&S Controls daily
- Maintain daily inspection log & submit at the end of each work day
- Attend all E&S Meetings
- Conduct post storm inspections
- Have authority to make corrections
- When requested, participates in other site reviews
- Coordinate corrective actions to maintain permit compliance at all times
- Monitor construction work for compliance with contract documents



## Slide notes

The Contractor also has specific responsibilities related to the environment. The Erosion and Sediment Control Manager (ESCM) must have both the MDE green card and the SHA yellow card certification. The ESCM must inspect and document the E & S Control condition on the project daily. This report is to be submitted to the Project Engineer per the specifications. It is imperative that the ESCM have the authority to coordinate any corrective actions necessary.

## Notes

## Slide 5 - SHA Quality Assurance Responsibilities Regional Environmental Coordinator

# SHA Quality Assurance Program Responsibilities Regional Environmental Coordinator

- Ensure compliance with the approved E&S Control Plan and SWM as-built process
- Review each project bi-weekly at a minimum and assign a rating
- Inspection to be documented using Inspection Form OOC 61 / QA-1
- Inspection Report will be given to the CPE and others as listed
- Review & possibly authorize any needed changes, modifications and/or revisions
- Authorized E&S Control removal

**Slide notes**

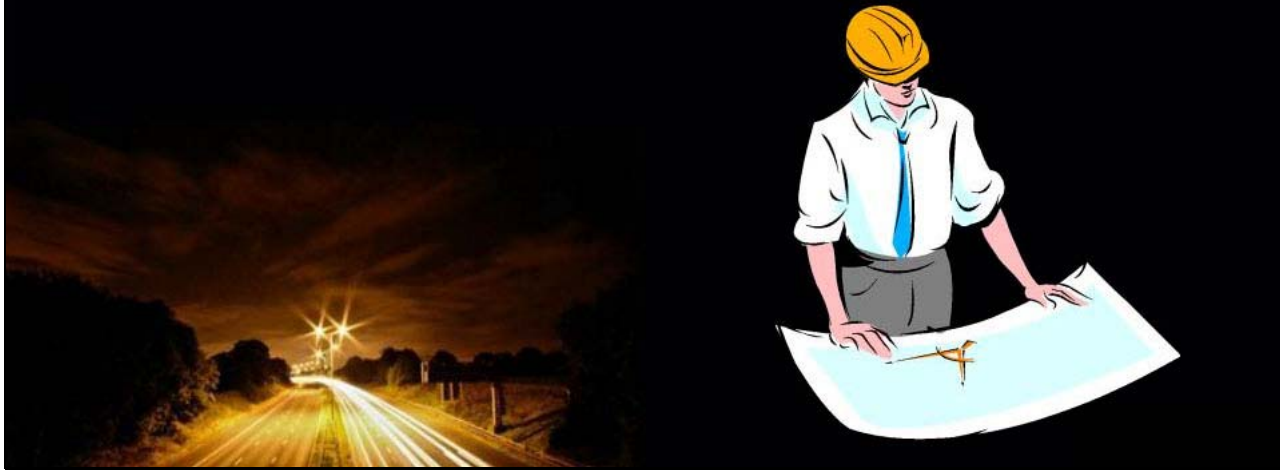
The Regional Environmental Coordinator has the responsibilities of conducting routine Quality Assurance Review on the project site. This is a objective graded review of the compliance status of the project and will be submitted to the Project Engineer to be included as part of the project record.

**Notes**

## Slide 6 - MDE Responsibilities

# MDE Responsibilities

- Strict enforcement to guard against erosion and sedimentation
- Monitor compliance with all related permits
- Conduct regular inspections
- Attend appropriate meetings
- Inspection findings will be reviewed with CPE

**Slide notes**

The Maryland Department of Environment has a responsibility to enforce the regulations and laws of the state with regards to environmental issues. MDE will conduct site reviews at their discretion and their reviews are a necessary part of the modification process. MDE must approve the removal of E & S Controls when final stabilization has been established.

**Notes**



## Slide 7 - Environmental Monitor (EM) Responsibilities

# Independent Environmental Monitor (IEM) Responsibilities

- Monitor contractors daily activities and permit compliance
- May or may not be assigned – Sometimes this person is a requirement in the MDE/COE permit or on Design/Build Projects
- Assigned by SHA Environmental Programs Division (EPD)
- Reports to the CPE, SHA EPD, HHD, MDE, USACE and/or as specified
- Provide an additional level of inspection
- Member of E&S Control Team
- Key focus is to monitor all activities that may affect environmental resources



## Slide notes

: A project may or may not have an environmental monitor. If required by a permit or deemed necessary by the administration this individual will be assigned by the environmental programs division of SHA. This team member has a responsibility of monitoring activities that impact environmental resources, and reporting to the required divisions within SHA and also to the regulatory agencies on a daily basis.

## Notes

**Slide 8 - Designated Specialist**

# Designated Specialist

- The Designated Specialist is a person assigned to a project who has expertise in the design and construction of elements that could impact environmental resources.

**Slide notes**

A designated specialist may also be assigned to a project as a requirement of the contract documents. This person has an expertise in environmental design and construction and has an ability to make field adjustments during the construction process. Often this individual is involved with stream or wetland projects.

**Notes**



## Slide 9 - E&amp;S Control Field Meeting

## E&S Control Field Meeting

- Schedule meetings with all required participants at least **7 days** before start of work
- Notify SHA QA **7 days** prior to the start of work
- Conduct field review as needed
- Promote Environmental Stewardship
- Discuss project expectations
- Identify & discuss critical environmental and constructability issues
  - **Nontidal Wetland 25' Buffer**
  - **Wetland of Special State Concern 100' Buffer**
  - **Chesapeake Bay Critical Area 1,000' Buffer**



### Slide notes

The specification requires that an initial Erosion and Sediment Control Field Meeting be held prior to the start of work on any project. MDE should be notified of this meeting in order for them to have an opportunity to attend. This meeting is the opportunity to discuss the environmental concerns on the project and discuss any constructability issues.

### Notes

## Slide 10 - E&amp;S Control Field Meeting

# E&S Control Field Meeting

- **Typical Attendees**

- Regional Construction Engineer
- QA Inspector
- MDE Enforcement Officer
- FHWA Area Engineer (If applicable)
- CID Inspectors
- Contractor's Superintendent
- Contractor's ESCM
- E&S Sub-Contractor's (If applicable)
- Engineering Design Team
- Environmental Programs Division
- District's Area Engineer (AE)
- Environmental Monitor (If assigned)



## Slide notes

There are many people who typically attend this meeting. It is recommended to have as many project team members as possible at this meeting to ensure everyone's concern is discussed and to clear up any confusion that may arise after construction activities have begun.

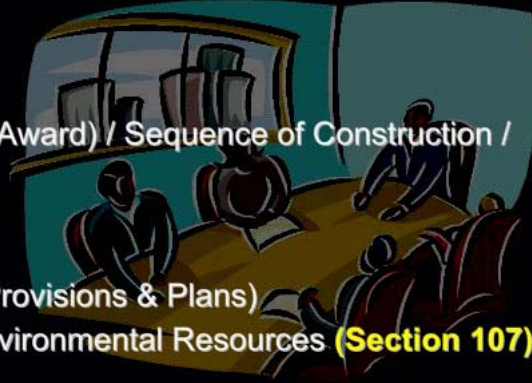
## Notes

## Slide 11 - E&amp;S Control Field Meeting

# E&S Control Field Meeting

- **Minimum Topics Discussed**

- Name and credentials of ESCM
- Approved E&S Control Plan
- Contractors daily E&S Report
- Contractors Schedule (**14 days** Notice of Award) / Sequence of Construction / Plan Implementation
- Evaluate Potential changes
- Review all Permits (On-site & Off-Site)
- Contract Documents (Permits, Contract Provisions & Plans)
- Description & Demarcation of LODs & Environmental Resources (**Section 107**)
- Vegetative Stabilization Requirements
- Projects E&S Control Measures
- Procedures for E&S Control Inspections (Implementation and Maintenance)
- QA E&S Control Rating System



## Slide notes

Many topics need to be discussed at this meeting. The responsibilities of each project stakeholder should be covered along with a complete review of the contract documents and permits for the work to be conducted. Methods of documentation should be reviewed with everyone in attendance. This meeting is an opportune time to discuss any modifications or changes that may be needed prior to the start of work.

## Notes



## Slide 12 - Inspection Recommendations

# Inspection Recommendations

- Knowledgeable of E&S Control Practices, Permit Special Conditions, Contract Documents & associated references
- Projects are Dynamic
  - **“INSPECT THEM”**
- Document findings
- Coordinate & Communicate effectively w/ Team
- Be objective, consistent, and professional



## Slide notes

Take the time necessary to become familiar with E and S control practices and reference documents that can help with proper site inspection. Construction sites are dynamic so take the time to do a thorough review. Document what you see accurately and take the time to communicate what is necessary to the project team. Photos are an effective method of documentation and may help to further clarify issues in the field.

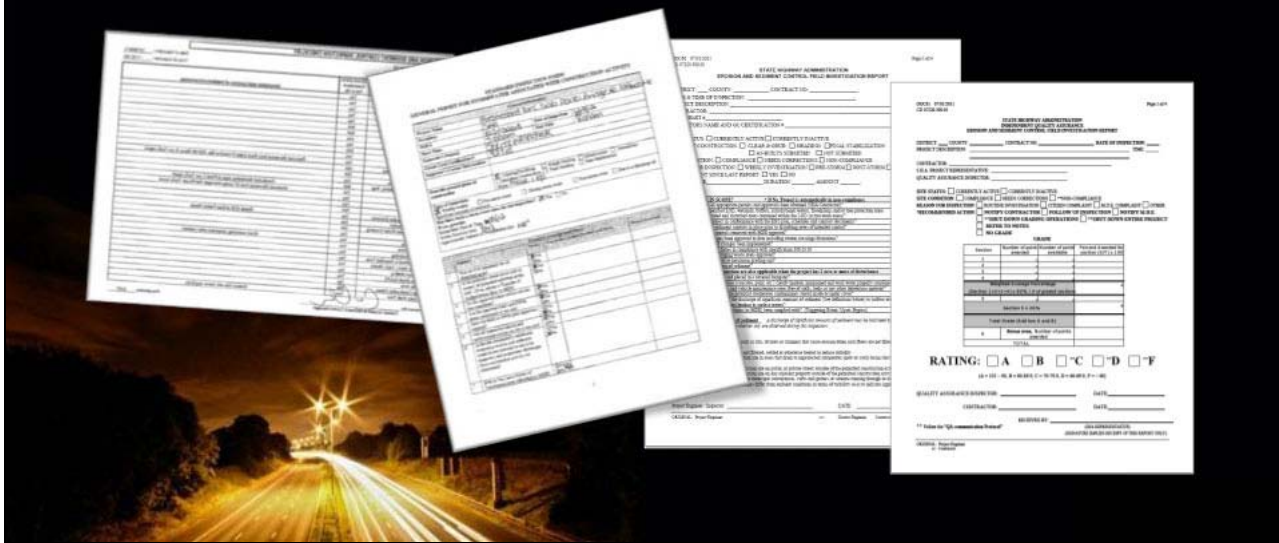
## Notes



## Slide 13 - Methods of Documentation

# Methods of Documentation

- Contractors daily report (completed by ESCM)
- OOC 60 (completed by SHA CPE)
- MDE Standard inspection form (Completed by SHA CPE on projects with an NPDES permit)
- OOC 61 / QA-1 (Completed by SHA REC)
- EM Daily inspection report (Completed by SHA Environmental Monitor)



## Slide notes

There are multiple methods of documentation on an S.H.A. project. Each team member will have a specific report or form to utilize from the contractors daily report to the MDE standard inspection that is completed by the Project Engineer. Take a moment to review the list of documents and responsibilities listed.

## Notes

**Slide 14 - Methods of Documentation**

# Methods of Documentation

Contractors daily report (completed by ESCM)

The contractor is to document:

- The condition of the E&S controls
- Any corrective actions
- All environmental issues on a project
- All relevant environmental information

**Slide notes**

The contractor is responsible for providing a daily report. They are to document the condition of the E&S controls on the project including any corrective actions, issues on the project and/or other relevant environmental information. S.H.A does not specify the format for the contractor's daily report. The contractors develop their own daily report specific to each project.


**Notes**

## Slide 15 - Methods of Documentation

# Methods of Documentation

Contractors daily report (completed by ESCM)

Limited E&S Report



Erosion & Sediment Control Field Investigation Report

District: VII County: Howard Contract #: \_\_\_\_\_

Project Description: Deck Replacement for Bridge No. 1304802 On US 29 Southbound Over I-70

Inspection Date: 4-6-2010 Time: 2:30 PM

Site Status: ☒ Currently Active ☐ Currently Inactive

Site Condition: ☒ Satisfactory Compliance ☐ Unsatisfactory Compliance

Reason for Inspection: ☒ Routine Investigation ☐ Citizen Complaint

☐ M.D.E. Complaint ☐ Other

Recommended Action: ☒ Follow up Inspection ☐ Notify M.D.E.

Comments / Statements of Findings: MONDAY APRIL 6- 2010  
I check the work on 29 and the everything  
was great

Received By: [Signature] Representative: [Signature]

Date: 4/6/10 Date: 4-6-2010

## Slide notes

This example of a contractor's daily report is formatted in a way that is a variation of the S.H.A O.O.C 60 form. Contractors need to include accurate details in their reports. A limited report like this is acceptable only if it reflects the true field conditions.

## Notes

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## Slide 16 - Methods of Documentation

# Methods of Documentation

Contractors daily report (completed by ESCM)

Detailed E&S Report

D-7

SHA Contract # CL3145168 Date of Inspection 6/15/16 Time 5:00 AM

Project Description MD 24 at Klee Mill Rd / MD 50 / Old Liberty Rd / Widening and Resurfacing

Inspector [Signature] SHA Status [ ] Site Condition [ ]

Contractor [ ] ☒ Currently Active ☐ Satisfactory in Control Use

☐ Currently Inactive ☐ Unsatisfactory / Non-Compliance

Reason for Inspection

☒ Daily Investigation

☐ Citizen Complaint

☐ MCE Complaint

☐ Pre / Post Storm

Recommended Action

☐ Corrective Action by Contractor (Immediate)

☐ Follow Up Inspection on [ ]

☐ Corrective Action by Third Party Contractor

☐ Corrective Action by Contractor (Before [ ])

Comments / Statement of Findings

① TOOK OUT CONST EAT AT STA 403+50 RT

② DID NOT REMOVE SAND RAIL DEVIATION DIKE UNTIL OK BY TED OR DAVE RYDER STA 403+50 RT

③ FIXED WASHOUTS AT STA 517+50 LT AND 519+29 LT WILL NEED SEED & MULCH

④ NO OTHER PROBLEMS TO REPORT AT THIS TIME

⑤ TILLMAN WORKING ON REMOVING ASPHALT AT STORAGE AREA STA 401+00 RT

⑥ LAST NIGHT OF SURFACE RD WAY FINISHED, NEEDS BACK-UP OF SHOULDER EDGE

Contractor Representative [Signature] SHA Representative [Signature]

## Slide notes

Here is an example of a more detailed report which is a variation of the OOC-60 form which includes numerous details such as repairs, control removal plans and work that is occurring on site. This report contains information that could possibly earn bonus points during a QA review of the project.

## Notes



## Slide 17 - Methods of Documentation

# Methods of Documentation

OOO 60 (completed by SHA PE)

OOO 60 (completed by SHA PE)

STATE HIGHWAY ADMINISTRATION  
EROSION AND SEDIMENT CONTROL FIELD INVESTIGATION REPORT

DISTRICT \_\_\_\_\_ COUNTY \_\_\_\_\_ CONTRACT NO. \_\_\_\_\_  
DATE & TIME OF INSPECTION \_\_\_\_\_  
PROJECT DESCRIPTION \_\_\_\_\_  
CONTRACTOR \_\_\_\_\_  
INSPECTOR NAME AND GC CERTIFICATION # \_\_\_\_\_

SITE STATUS ☐ CURRENTLY ACTIVE ☐ CURRENTLY INACTIVE  
REASON FOR INSPECTION ☐ CLEAR A GROUND ☐ GRADING ☐ SPECIAL STABILIZATION  
☐ AN-REDS VARIATION ☐ INSURANCE

SITE CONDITION ☐ COMPLIANCE ☐ NEEDS CORRECTION ☐ NON-COMPLIANCE  
REASON FOR DISCREPANCY ☐ WEEKLY INSPECTION ☐ PRE-STORED ☐ POST-STORED ☐ OTHER  
STORM EVENT SINCE LAST REPORT ☐ YES ☐ NO  
DATE & TIME \_\_\_\_\_ DURATION \_\_\_\_\_ AMOUNT \_\_\_\_\_

**II. PROJECT INFORMATION** (If No, Project is non-compliant in area conditions)

NO.	DESCRIPTION	YES	NO	REMARKS
1	Is there a permit for the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	Is the permit for the project valid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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99	Is the permit for the project valid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
100	Is the permit for the project valid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Project Engineer (Signature) \_\_\_\_\_ DATE \_\_\_\_\_  
Contractor (Signature) \_\_\_\_\_

## Slide notes

The intent of the SHA Field Checklist (O.O.C-60) is to combine information from the QA checklist and information related to the N.P.D.E.S permit standard inspection form. This form distinguishes between projects that are one acre or more in disturbance and those that are not. This form is to be completed by the Project Engineer per the Office of Construction Directives.

## Notes

## Slide 18 - Methods of Documentation

## Methods of Documentation

**MDE Standard inspection form (Completed by SHA PE on projects with an NPDES permit)**

<b>STANDARD INSPECTION FORM</b> <b>GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY</b>			
General Information			
Project Name _____			
Location _____			
NDEP # _____		Date of Inspection _____	
Start Time _____		End Time _____	
Inspector's Name(s) _____			
General Certification & Signature _____			
Inspector's Contact Information _____			
Describe general phase of construction _____			
<input type="checkbox"/> Clearing/Grubbing <input type="checkbox"/> Rough Grading <input type="checkbox"/> Infrastructure <input type="checkbox"/> Paving <input type="checkbox"/> Building Construction <input type="checkbox"/> Final Grading <input type="checkbox"/> Final Substation			
Type of Inspection: _____			
<input type="checkbox"/> Walk-around <input type="checkbox"/> Pre-construction <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event <input type="checkbox"/> Due to a discharge of pollutants or sediment			
<input type="checkbox"/> Is there a storm event near the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, provide: _____			
Storm Date & Time _____ Storm Duration (hr) _____ Approximate Amount of Precipitation (in) _____			
Subject		Permit Categories and Plans Corrective Action Needed and Notes	Best Corrected
1	Was an NCE obtained for all disturbed areas?	22/06/2016	
2	Is the operator listed above still in control of permitted activities, or the ops? If not, provide a contact of authorization from NDEP.	22/06/2016	
3	Do the approved plans reflect current site conditions?	22/06/2016	
4	Has the approved EPPP and NDEP plan submitted to the ops?	22/06/2016	
5	How the EPPP or NDEP plan approvals reported?	22/06/2016	
6	How the inspection report and sediment control on file at the ops?	22/06/2016	
7	Is the ops personnel informed, negatively impacts and sediment controls are required or set to be installed, and no unnecessary discharge from construction activity was minimized?	22/06/2016	
8	How is the Ops a Member of Stormwater Best Management Practices?	22/06/2016	

1

Subject		Form: Contents and Plans	
		Corrective Action Needed and Notes	Item Corrected
1	Is an all discharge assigned individual or contractor in an authorized by the permit?	2/1/06 2/1/06	
<b>Discharge of significant elements of sediment</b>			
<b>Discharge of sediment</b>		2/1/06	None
Is there evidence of the discharge of sediment elements of sediment to surface waters, or construction process, leading to sedimentation?		2/1/06 2/1/06	
If the answer of significant elements of sediment may be indicated by that it is not limited to observations of the following: "None"			
Discharge of sediment elements of sediment			
1	Is there evidence of sedimentation?	2/1/06 2/1/06	
2	Is there evidence of sedimentation?	2/1/06 2/1/06	
3	Is there evidence of sedimentation?	2/1/06 2/1/06	
4	Is there evidence of sedimentation?	2/1/06 2/1/06	
5	Is there evidence of sedimentation?	2/1/06 2/1/06	
6	Is there evidence of sedimentation?	2/1/06 2/1/06	
7	Is there evidence of sedimentation?	2/1/06 2/1/06	
8	Is there evidence of sedimentation?	2/1/06 2/1/06	
9	Is there evidence of sedimentation?	2/1/06 2/1/06	
10	Is there evidence of sedimentation?	2/1/06 2/1/06	
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## Slide notes

Completion of this four page checklist is a requirement of the N.P.D.E.S Permit. It is completed weekly and next day after a runoff producing rain event. Corrective actions must be documented on this form. It is also a requirement for the checklist to be completed for the duration of the project and until the notice of termination is submitted and approved by M.D.E. The completed reports are to be maintained at the project field office.

## Notes

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## Slide 19 - Slide 19

# Methods of Documentation

Quality Assurance Toolkit (www.oedtoolkits.net)

Welcome to the OED Toolkit Portal  
Your workbench for all toolkit activities

Select the toolkit to access from the options below

**IEM Toolkit** **QA Toolkit** **MDE Toolkit**

**Request Account** Download document to request a new account in any of the toolkits

**Update Account** Download document to update account information

**SHA** State Highway Administration  
Maryland Department of Transportation

**OED** OFFICE OF ENVIRONMENTAL DESIGN  
DESIGN • COMPLIANCE • SUSTAINABILITY

**Quality Assurance Toolkit**

Login:   
Password:   
  
[Forgot your password?](#)

If you are a QA Inspector who has been directed to use this system and do not have a login account, contact your supervisor to obtain an account.

**Links**

- OED Toolkit Portal Home
- Maryland Department of the Environment
- Wetlands and Waterway Construction Program Directory
- Environmental Protection Agency
- International Erosion Control Assoc.
- National Highway Institute
- FHWA Environmental Guidebook
- COMAR Online

**SHA Yellow Card Training**

**SHA** DESIGN AND CONSTRUCTION CONTROL CERTIFICATION  
YOUR NAME

**MDE Responsible Personnel Certification**

**State of Maryland**  
1. Complete the following certification form and submit it to the OED Toolkit Portal.

## Slide notes

The OOC 61 will be utilized on projects for the completion of a quality assurance review by the regional environmental coordinator. When looking at this checklist it combines 2008 specification information as well as the N.P.D.E.S standard inspection form. This form utilizes a weighted graded system that puts emphasis on timelines of corrective actions to match the current S.H.A specifications. Section 5 of this form is now worth 20 percent of the entire grade. The form has the ability to be utilized on all projects for QA review. Only the projects with one acre or more of disturbance will be required to complete the questions related to the N.P.D.E.S.

The QA Toolkit is a Web-based technology and is accessible to users who have accounts. This online reporting and database system can provide real time access to QA inspection reports and project information. This toolkit is utilized by the REC for completion of the OOC 61 report. QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA program to allow more inspections to maintain an even higher level of compliance.

The Quality Assurance Toolkit is a Web-based technology and is accessible to users who have accounts. Accounts may be requested by completing the form available at "www.O E D toolkits.net". This online reporting and database system can provide real time access to project information such as QA-1 reports or modification request status.

## Notes

## Slide 20 - Methods of Documentation

# Methods of Documentation

OOC 61 / QA-1 (Completed by Regional Environmental Coordinator)

Question	Answer	Awarded (Excluded)
1.1. Have all appropriate permits and approvals been obtained (SHA/Contractor)?	C Y C N # N/A	
1.2. Are specified LOD, wetlands, buffers, jurisdictional waters, floodplains and/or tree protection areas delineated and disturbed areas contained within the LOD (active work areas)?	C Y C N # N/A	
1.3. Is the project in conformance with the E&S plan, schedule and contract documents?	C Y C N # N/A	
1.3.1. Are sediment controls in place prior to disturbing areas of intended control?	C Y C N # N/A	(4)
1.3.2. Are controls removed with MDE approval?	C Y C N # N/A	(2)
1.4. Have all changes been approved to date including stream crossings/diversions?	C Y C N # N/A	(4)
1.5. Have approved changes been implemented?	C Y C N # N/A	(1)
1.6. Are the E&S duties in compliance with specification SBE.03.03?	C Y C N # N/A	(4)
1.7. Are stockpiles/grading/beam areas approved?	C Y C N # N/A	(2)
1.8. Is grading limited to maximum grading unit?	C Y C N # N/A	(2)
1.9. Are roadways clear of sediment?	C Y C N # N/A	(2)
NPOES The following questions are also applicable when the project has 1 acre or more of disturbance		
1.10. Is trash collected and placed in a covered dumpster?	C Y C N # N/A	(2)
1.11. Are washout facilities (concrete, paint, etc.) clearly marked, maintained and wash water properly contained?	C Y C N # N/A	(2)
1.12. Are fuel containers and vehicle maintenance areas free of spills, leaks or any other deleterious materials?	C Y C N # N/A	(2)
1.13. Are materials that are potential stormwater contaminants stored inside or under cover?	C Y C N # N/A	(2)
Section Total		8/8

Question	Answer	Awarded (Excluded)
2. Are Controls Properly Installed?		
2.1. Water Handling		
2.1.1. Earth Dikes	C Y C N # N/A	(1)
2.1.2. Temporary Soakles	C Y C N # N/A	(1)
2.1.3. Perimeter Dike/Soakles	C Y C N # N/A	(1)
2.1.4. Diversion Fence	C Y C N # N/A	(1)
2.1.5. Asphalt Berms	C Y C N # N/A	(1)
2.2. Grade Stabilization Structures		
2.2.1. Pipe Slope Drains	C Y C N # N/A	(2)
2.2.2. Rip-rap Inflow Protection	C Y C N # N/A	(1)

## Slide notes

The QA-1 will be utilized on projects for the completion of a quality assurance review by the regional environmental coordinator. When looking at this checklist it combines 2008 specification information as well as the N.P.D.E.S standard inspection form. This form utilizes a weighted grading system that puts emphasis on timelines of corrective actions to match the current S.H.A specifications. Section 5 of this form is worth 20 percent of the entire grade. The form has the ability to be utilized on all projects for QA review. Only the projects with one acre or more of disturbance will be required to complete the questions related to the N.P.D.E.S.

QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA program to allow more inspections to maintain an even higher level of compliance.

The QA Toolkit is a Web-based technology and is accessible to users who have accounts. This online reporting and database system can provide real time access to QA inspection reports and project information. This toolkit is utilized by the REC for completion of the QA-1 report. QA reports will be completed on a lap top in the field and can be instantly accessed for review over the internet by all of the project stakeholders including outside agencies. This electronic system eliminates communication delays, human error in transferring data for reporting purposes, redundant paperwork and can increase the efficiency of the QA program to allow more inspections to maintain an even higher level of compliance.

## Notes





Slide 22 - Slide 21

# Modifications and QA Concurrence

SHA has the ability to approve E&S plan modifications within the Administration without going back to MDE. These modification approvals may have to go to multiple offices or divisions depending on the complexity.

**Modifications that affect environmental resources covered by permits other than E&S will still have to be reviewed and approved by those outside agencies.**

**Some Examples include:**

- MDE wetlands and waterways
- Army Corps of Engineers
- Department of Natural resources
- Soil and Conservation Districts



## Slide notes

When an E & S modification is needed there is a specified method of getting approval. There is currently an agreement between MDE and SHA that does allow plan modifications. Please consider that these modifications may take some time for approval to be obtained and the work cannot be done without that approval.

Keep in mind that if a modification affects an environmental resource such as a wetland or waterway then there may be multiple other agencies that must also agree with the modification. An example of this would be a change to a stream diversion; this would require MDE wetland and waterways to agree along with the US Army Corps of Engineers.

## Notes

## Slide 23 - Slide 22

# Modifications and QA Concurrence

A Modification to the plan is whenever there will be a change to the approved set of plans.

- ✓ Adding an E&S control
- ✓ Substituting an E&S control
- ✓ Adjusting the LOD
- ✓ Modifying an E&S control

QA Concurrence is when a change is not made but notification and concurrence is needed as part of the course of work. These requirements are often a part of the plans.

- ✓ Stockpile and Staging location within LOD
- ✓ Move to the next phase of work
- ✓ Convert a stormwater management facility
- ✓ Remove controls with adequate growth



## Slide notes

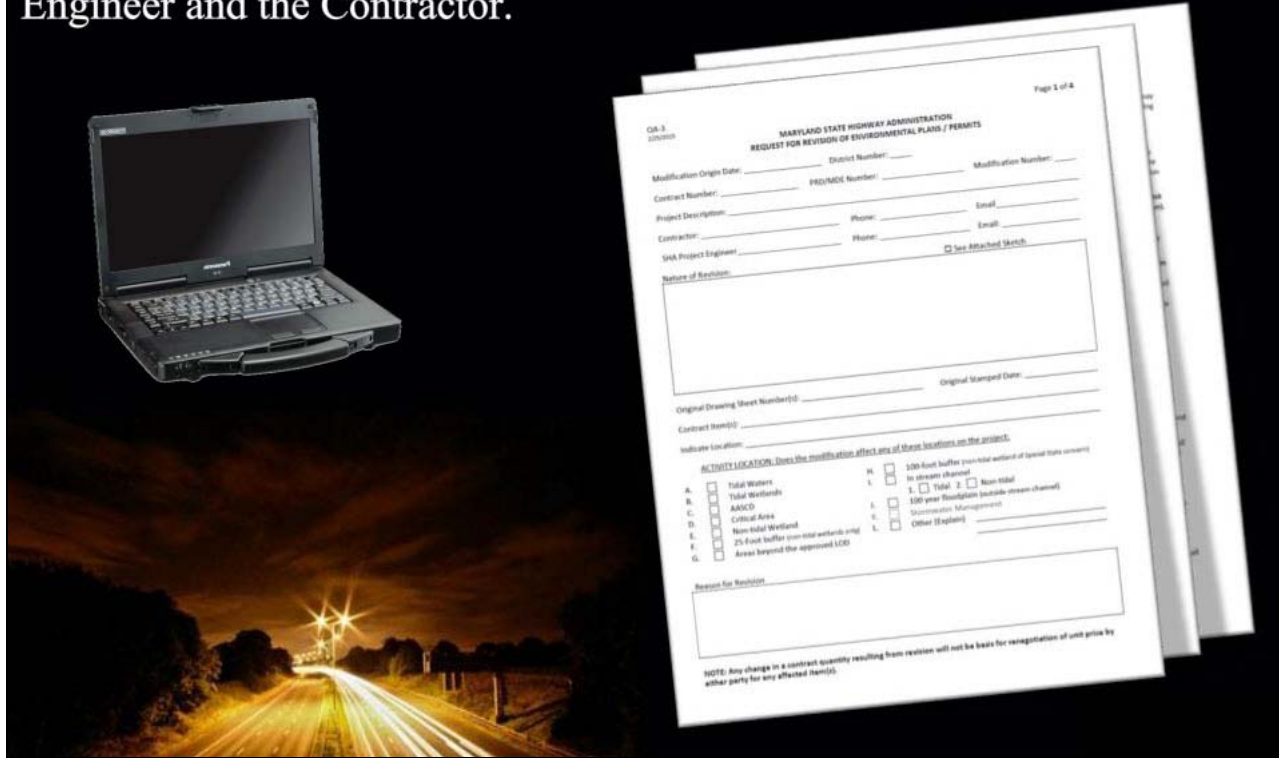
When considering a modification request, keep in mind that there is a difference between when a modification is needed and when QA concurrence is needed. A modification is a true change to a plan or permit. When permission is needed to continue work according to the plan but no actual change is occurring that is a QA-concurrence. Often the need for QA concurrence will be outline on the plans

## Notes

## Slide 24 - Slide 27

# Modifications

The **OOC62 / QA-3** form will be utilized for modification requests. This will be an electronic form accessible in the QA toolkit by the Project Engineer and the Contractor.

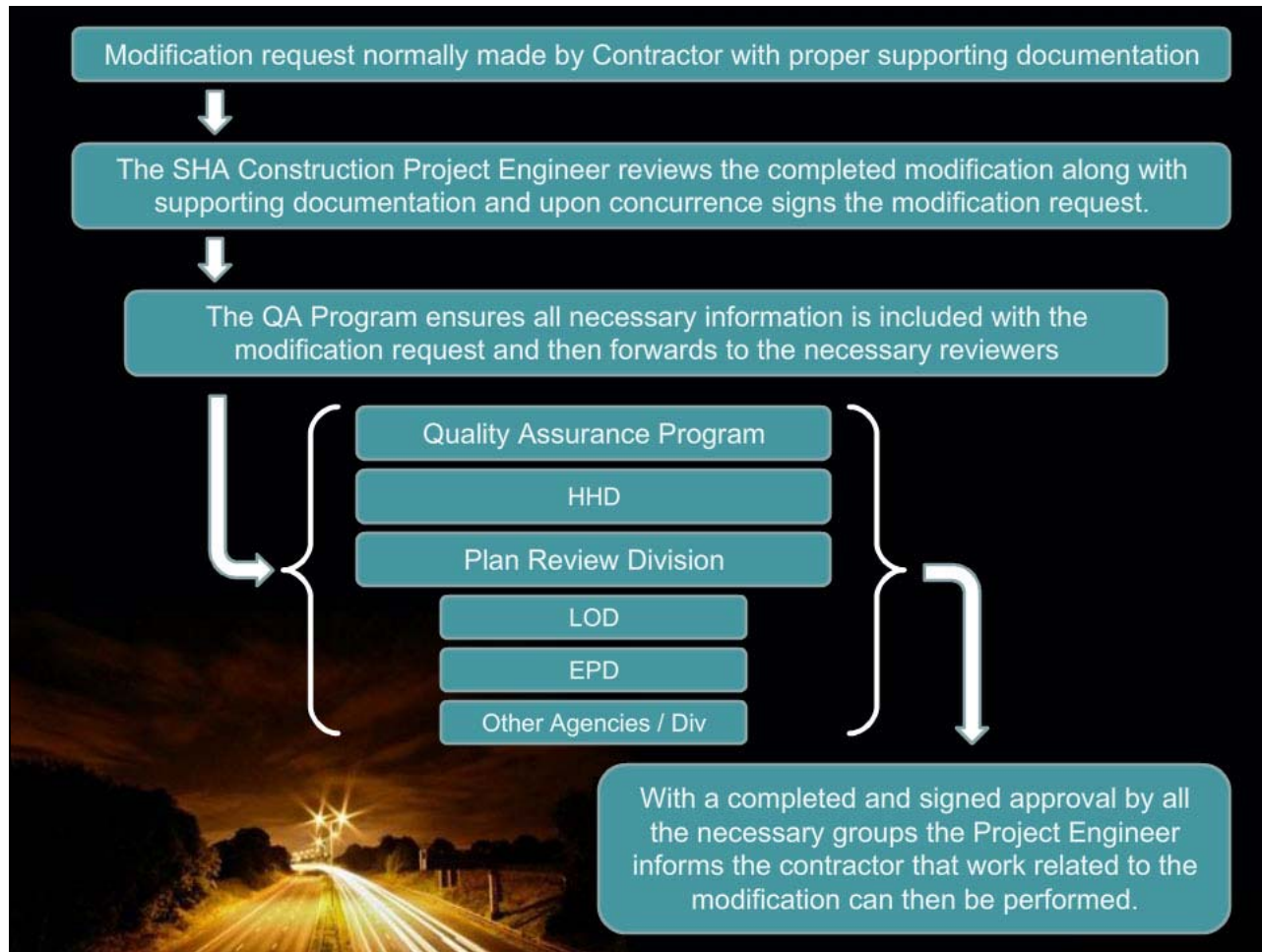


## Slide notes

The QA-3 form within the QA toolkit is utilized for the modification process. A plan mark-up should also be included with the request.

## Notes



**Slide 25 - Slide 24****Slide notes**

Here is the process to be followed when seeking a plan modification. The contractor may submit the modification and the SHA project engineer will review the plans and permit conditions for any conflicts. If the Project engineer concurs with the modification then the associated information should be submitted through the QA Toolkit for review. The QA program will oversee the process to ensure the correct reviewers see the request. The QA toolkit is designed to notify all stakeholders of the most recent status of their request through e-mail. Remember, the REC can only approve QA concurrence requests, any modifications should go through the established process.

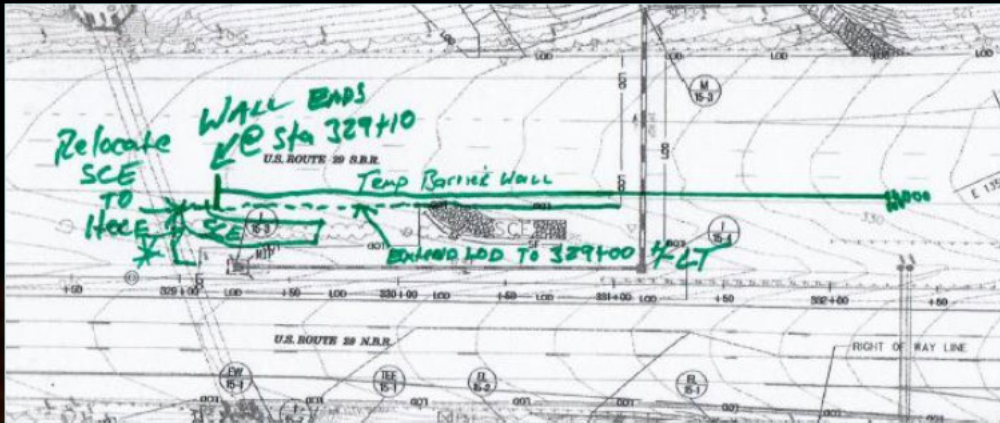
**Notes**

## Slide 26 - Slide 28

# Modification Package issues

To little information

- The description needs to be clear and include a plan sheet markup
- The reviewers are not on your project and need to see all associated plan information
- The markups may be hand drawings on the plan sheets that are then scanned into an electronic document



## Slide notes

Let's look at some of the information that should be included with a modification request. The request should include a clearly marked plan sheet. This drawing must include the north arrow and signature block of the pages that the modification affects.

Remember that the reviewers may have never been to your project sight and therefore need as much information as possible in order to make an informed decision. Including a photo of the area can also be a key piece of information in the review process.

## Notes

**Slide 27 - Modification Package issues**

# Modification Package issues

Does it make sense? (This is where the REC can help)

- Review you information to insure someone else can make sense of it
- Stations listed in the description that correspond to drawing

Nature of Revision:

☐ See Attached Sketch

Need to extend the LOD at approximately station 106+53+/- rt

Nature of Revision:

☒ See Attached Sketch

Extend LOD +/- 20 feet along west side of MD 175 EB Ramp due to installation of storm drain on existing steep slope. The planned SSF is only 10 feet from the edge of the pipe trench. The slope is steep and the spoil pile will be falling down the slope since there is not enough room to place the spoil between the right edge of the pipe to the existing W-Beam. We are requesting the SSF and LOD to extended to the toe of the slope still within SHA ROW. Attached is the plan sheet showing the existing and proposed condition of the request to extend the LODF and relocate the SSF

**Slide notes**

Providing enough information is critical. Limited information could result in a denial of the request or multiple responses asking for additional information. The narrative should reflect exactly what is being requested.

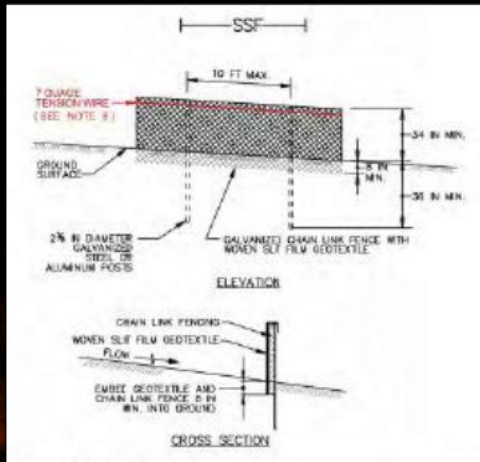
**Notes**

## Slide 28 - Modification Package issues

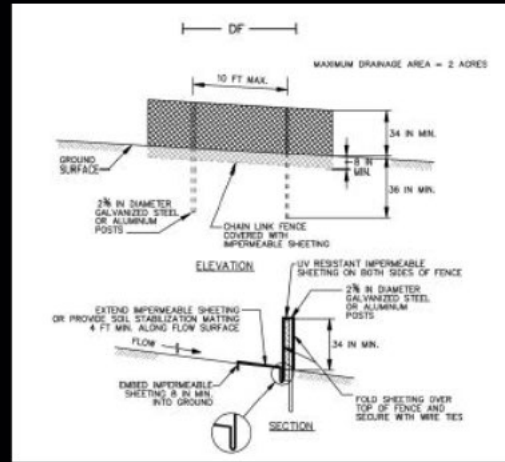
# Modification Package issues

Does it make sense? (This is where the REC can help)

- Are you asking for the correct modification?
  - LOD expansion vs. Sequence change
  - Correct control methodology



≠



## Slide notes

Ensure that the request makes sense. The example shows that super silt fence is not an alternative to diversion fence. These two devices are differing control methodologies. Super silt fence is a filtering method while diversion fence is a conveyance method.

## Notes



## Slide 29 - Permit Modification Support Divisions

## SHA Support Divisions

- **EPD** – Non-tidal/Tidal Wetlands/Buffers and Waterways, Floodplains
  - MDE & USACE Permit, USFWS & DNR Issues
- **HHD** – E&S Control, NPDES, AASCD, Stormwater Management
  - MDE / PRD Permits
- **LOD** – Tree Permits, NMP, Vegetation
- **EPLD** – Critical Areas, Archeological / Historical, NEPA, MEPA
- **OBD** - Coast Guard



### Slide notes

The project may contact the Administration's support divisions for assistance. They are the engineers who work directly with the regulatory agencies. Contact the Regional Environmental Coordinator (REC) with any questions.

### Notes

**Slide 30 - Closeout of Project**

## Closeout of Project

- Semi-Final & Final Review "Punch List"
  - Coordinate w/ related parties
- Ensure Permit Conditions and Mitigation Requirements
- Comply w/ NMP & Vegetative Stabilization Requirements
- QA Program Coordination for Final Stabilization and Control Removal
- Submit NOT
- Complete & Submit Permit Certification Letters

**Slide notes**

When a project is complete there are still a few steps necessary to close-out the project. A final review will be held by the District office. It is important to ensure all permit conditions have been met along with the stabilization requirements. MDE must give approval to remove the final controls and the Administration's District representatives must complete and submit the notice of termination and permit certification letters.

**Notes**

**Slide 31 - End**



**Slide notes**

This concludes the organization and documentation portion of the training. Please select the next module to continue the training

**Notes**

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